US Geological Survey Cactus Moth Detection Network

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The US Geological Survey, National Biological Information Infrastructure, and the Mississippi State University entered into a partnership in 2004 to develop the Cactus Moth Detection Network. A team of scientists at Mississippi State University is collaborating on an overall project with six components. The Mississippi Entomological Museum has developed techniques for identification of cactus moth, as well as verifying the identification of field specimens. Surveys for native prickly pear cactus species have been conducted to map the locations of potential hosts. Volunteers are being solicited to establish an early detection network for cactus moth at geo-referenced sentinel sites. A predictive model is under development to predict the locations of prickly pear cactus populations. A wide range of extension publications have been developed for the use of volunteers, resource managers, and other. Lastly, a web-based database and ArcIMS map have been developed (http://www.gri.msstate.edu/cactus_moth) to track cactus and cactus moth is available. Our group is active in coordinating our efforts with other groups working on cactus moth, as well as other invasive species efforts within USGS and NBII. Regular updates in the form of monthly reports are available either on the webpage, or through a subscription e-mail list.